

Notice of Allowability

Application No.

10/674,200

Examiner

Stephen J. Cherry

Applicant(s)

STEFAN, DONALD A.

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5-26-2006.
2. ☒ The allowed claim(s) is/are 1-4, 6-9, 12-18 and 21-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Egan on 6-10-2006.

Please delete claims and replace with:

1. (Currently Amended) A system for remotely monitoring electrical power supplies, comprising:

a plurality of individual input modules each connected to a respective power source and having means to receive an analog voltage input and to convert said analog signal to a digital form, each said input module is used for DC battery voltage and DC charger/bus voltage, DC amperage at the DC bus, AC input voltage sensing, and both individual battery temperature and ambient temperature sensing, the different voltage ranges and type of voltage are programmed on system requirements;

central controller means connected to collect data from each input module and, at scheduled intervals, send that data to web server means containing primary system software capable of performing data comparisons, charting trends, predicting failures, planning and scheduling service visits, and archiving data for future reference, said software also providing near real time reports, regular monthly reports, and alarm

notifications which can be sent via E-mail, telephone land lines, cell phone, PDA, or pager.

2. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 1, wherein each said input module comprises:

DC battery lead attachment means;

AC input voltage power transformer means;

temperature thermistor means attached to each battery being monitored; and
current transformer means.

3. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 1, further comprising:

wiring harness means in each said input module means, each said battery being monitored is attached to one end of said wiring harness means the other end of which is attached to connector means of said input module, the number of wires in said wiring harness means being one more wire than the number of batteries being monitored.

4. (Previously Amended) The system for remotely monitoring power supplies according to claim 3, further comprising:

additional sensor means attached to said input modules through said harnesses.

5. (Canceled)

6. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 1, wherein said central controller comprises,

microprocessor means to collect data from said input modules, store and summarize said data, said data including: system data, power measurements, date/time stamps, and module information embedded in the data; and

a two-way communication link.

7. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 1, wherein said software is embedded in each said input module means and said central controller means;

one of said input module means attached to each sensor and set for the voltage type and range in which it will be collecting data.

8. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 7, wherein said data includes site-specific information, individual input module serial numbers, uninterruptible power supply or battery system model and serial number, start date, technician/installer information, and a benchmark reading of each the battery's float level and possible discharge rate.

9. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 1, wherein said

software resides at a web site thereby providing: security from theft; reduced chance of hackers entering the network; one upgrade affects all sites; reduced customer support; reduced computer system requirements at the site; and a lower cost of installation and hardware for customers who have local PC and Internet connection.

10. (Canceled)

11. (Canceled)

12. (Currently Amended) A system for remotely monitoring electrical power, which includes both electrical power from commercial electrical power utilities and battery operated electrical power backups, comprising

a plurality of individual input module means each connected to a respective electrical power source and each receiving an analog voltage input indicative of the status of said electrical power supply and converting said analog signal to a digital signal;

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central controller means connected to collect said digital data from each input module means;

web server means containing primary system software capable of performing data comparisons, chart trends, predict failures, plan and schedule service visits, and archive data for future reference, and at scheduled intervals said web server means receiving said digital data from said central controller, said software embedded in the input module and central controller;

an input module attached to each sensor and set for the voltage type and range in which it will be collecting data;

said data including site-specific information, individual input module serial numbers, site information, uninterruptible power supply or battery system model and serial number, start date, technician/installer information, a benchmark reading of the battery's float level and possible discharge rate.

13. (Previously Amended) The system for remotely monitoring electrical power according to claim 12, wherein each said input module means comprises:

DC battery lead attachment means;

AC input voltage power transformer means;

temperature thermistor means attached to each said DC battery; and

current transformer means.

14. (Previously Amended) The system for remotely monitoring electrical power according to claim 12, further comprising:

wiring harness means in each said input module means, each said wiring harness having one end attached to each battery and attached to an input module bus on the other end, the number of wires in a wiring harness consisting of one more wire than the number of batteries connected by said wiring harness.

15. (Previously Amended) The system for remotely monitoring electrical power according to claim 14, further comprising:

additional sensor means attached to said input modules through said wiring harness mean.

16. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 12, wherein each said:

input module means measures DC battery voltage, DC charger/bus voltage, DC amperage at the DC bus, and both individual battery temperature and ambient temperatures, the different voltage ranges being programmed in said central controller software

17. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 12, wherein each said:

input module means senses AC input voltage and ambient temperature, the voltage ranges programmed in said central controller software.

18. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 12, wherein central controller comprises,

microprocessor means to collect digital data from said input modules, store and summarize said digital data, which includes: system data, power and battery measurements, date/time stamps, and input module information; and

two-way communication means with customers.

19. (Canceled)

20. (Canceled)

21. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 12, wherein said software resides at the web site thereby providing: security from theft; reduced chance of hackers entering the network; one

upgrade affects all sites; reduced customer support; reduced computer system requirements at the site; and a lower cost of installation and hardware for customers who have local PC and Internet connection.

22. (Previously Amended) The system for remotely monitoring electrical power supplies according to claim 12, wherein said software of said web server also provides near real time reports, regular monthly reports, and alarm notifications which can be sent via E-mail, telephone land lines, cell phone, PDA, or pager.

23. (Previously Added) The system for remotely monitoring electrical power supplies according to claim 1, wherein said power supply is AC.

24. (Previously Added) The system for remotely monitoring electrical power supplies according to claim 1, wherein said power supply is DC.

The following is an examiner's statement of reasons for allowance:

Claim 1 recites "a plurality of individual input modules each connected to a respective power source and having means to receive an analog voltage input and to convert said analog signal to a digital form, each said input module is used for DC battery voltage and DC charger/bus voltage, DC amperage at the DC bus, AC input voltage sensing, and both individual battery temperature and ambient temperature sensing, the different voltage ranges and type of voltage are programmed on system requirements". This feature, in combination with additional claimed structure, overcomes the prior art of record.

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Claim 12 recites "an input module attached to each sensor and set for the voltage type and range in which it will be collecting data;

said data including site-specific information, individual input module serial numbers, site information, uninterruptible power supply or battery system model and serial number, start date, technician/installer information, a benchmark reading of the battery's float level and possible discharge rate". This feature, in combination with additional claimed structure, overcomes the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

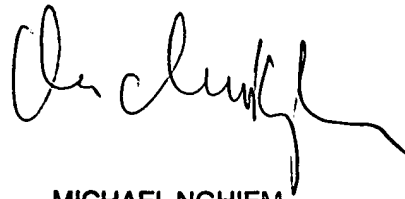
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Cherry whose telephone number is (571) 272-2272. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SJC

A handwritten signature in black ink, appearing to read 'Michael Nghiem', with a stylized flourish extending to the right.

MICHAEL NGHIEM
PRIMARY EXAMINER